

What is claimed is:

1. An apparatus for guiding a fastener that fastens a first vertebral bone portion with a second vertebral bone portion, comprising:  
5 a first member having first guide adapted to contact the first vertebral bone portion;  
a second member having a second guide aligned with said first guide and adapted to contact the second vertebral bone portion; and  
a clamping mechanism provided between said first and second members to clamp said first guide to said first bone portion and said second guide to second bone portion, wherein said first guide and said second guide are aligned to indicate fastener alignment.  
10

2. The apparatus of claim 1, wherein one of said first and second members includes a handle receiving member and a handle removably coupled to said handle receiving member.  
15

3. The apparatus of claim 2, wherein said handle is oriented at an angle with respect to a longitudinal axis extending through said first guide and said second guide.  
20

4. The apparatus of claim 1, further comprising a locking mechanism to lock relative position between said first and second members.

5. The apparatus of claim 4, wherein said locking mechanism includes a lever coupled between said first and second members, said locking mechanism further including a spring coupled to said lever to bias said lever into locking position.

10 6. The apparatus of claim 1, wherein said first guide is adapted to receive a guide tube.

15 7. The apparatus of claim 1, wherein said first guide has a hollow cylindrical shape and a serrated contact surface for contacting the first bone portion.

20 8. The apparatus of claim 1, wherein said second member includes a support arm coupled to said second guide and a rack coupled to said support arm for engaging said clamping mechanism.

25 9. The apparatus of claim 8, wherein said first member includes a rack receiver cavity provided therein for receiving said rack.

10. The apparatus of claim 9, wherein said first member has a pinion provided therein to engage said rack.

20 11. The apparatus of claim 1, wherein said clamping mechanism includes a pinion.

25 12. The apparatus of claim 11, further comprising a driver coupled to said pinion.

13. The apparatus of claim 1, further comprising a handle provided on one of said first and second members.

5 14. The apparatus of claim 1, further comprising a handle provided on said first member and a locking mechanism provided on said first member.

10 15. The apparatus of claim 1, further comprising a screw length indicator provided on said second member to indicate a length of screw required to join the first and second bone portions together.

16. The apparatus of claim 1, wherein said first guide has a semi-cylindrical shape.

15 17. The apparatus of claim 1, further comprising a guide tube coupled to said second guide.

18. The apparatus of claim 17, further comprising a trocar provided in said guide tube.

20 19. The apparatus of claim 17, further comprising an awl provided in said guide tube for cutting bone.

25 20. The apparatus of claim 17, further comprising a drill bit provided in said guide tube.

21. The apparatus of claim 20, wherein said drill bit includes depth indicators provided thereon.

5 22. The apparatus of claim 17, further comprising a screw driver provided in said guide tube.

23. The apparatus of claim 22, wherein said screw driver has a self-retaining screw head.

10

24. The apparatus of claim 22, wherein said screw driver has a hexagonal head.

15

25. The apparatus of claim 17, further comprising a tap provided in said guide tube.

26. The apparatus of claim 1, wherein said clamping mechanism clamps the first vertebral bone portion and the second vertebral bone portion together.

20

27. The apparatus of claim 1, wherein said clamping mechanism accommodates varying anatomy.

28. A method, comprising:

providing a fastener placement guide having a first member with a first guide, a second member with a second guide aligned with said first guide, and a clamping mechanism to clamp the first and second members;

aligning the first and second guides along two vertebral bone portions;  
5           clamping the two vertebral bone portions together with the first and second members; and

fastening the two vertebral bone portions together with a fastener in alignment with the first and second guides.

10       29.     The method of claim 28, further comprising:

making a first incision over the two bone portions;  
making a second incision in alignment with the first and second guides away from the first incision;  
feeding a guide tube with a trocar through the second incision; and  
15       coupling the guide tube to the first guide.

30.     The method of claim 29, further comprising:

removing the trocar from the guide tube;  
inserting an awl into the guide tube; and  
20       cutting bone with the awl.

31.     The method of claim 30, further comprising:

removing the awl from the guide tube;  
inserting a drill bit into the guide tube; and  
25       drilling a hole in the bone portions with the drill bit.

32. The method of claim 31, further comprising:  
determining drill depth and fastener length by reading length markings on the  
fastener placement guide; and  
5 confirming the drill depth by reading depth markings on the drill bit.

33. The method of claim 32, further comprising:  
removing the drill bit from the guide tube;  
threading the hole in the bone portions with a tap; and  
10 wherein said fastening includes screwing a screw in the hole.

34. The method of claim 28, wherein said fastening includes screwing the  
two bone portions together.

15 35. The method of claim 28, wherein said clamping includes tightening the  
clamping mechanism.

36. The method of claim 28, wherein the two bone portions are separate  
vertebrae.

20 37. The method of claim 28, wherein said aligning includes:  
positioning the first guide at a desired exit point for the fastener; and  
positioning the second guide at a desired entry point for the fastener.